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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,413	01/23/2001	Cynthia L. Cassel	887	2467

7590 05/20/2004

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EXAMINER	
PHAM, TOAN NGOC	

ART UNIT	PAPER NUMBER
2632	

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/767,413	CASSEL ET AL.	
	Examiner	Art Unit	
	Toan N Pham	2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

In view of the Board of Patent Appeals and Interferences' comment/decision, the cited reference fails to teach the claimed "soft and formable strap". Prosecution is re-open in view of the newly found reference Montgieux (US 4,696,307); and references of record, Teodorescu et al. (US 6,011,477), O'Dwyer (US 5,928,157), and Tao (US 4,862,144).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (4,696,307).

Regarding claim 1: Montgieux discloses a breathing detection device and alarm comprising an attachable transmitter placed inside the box (1) and attached to an abdominal belt (29), that is elastic; the transmitter is connected with a portable receiver carried by the person monitoring the child. Montgieux does not use the term "pliable chest strap of a soft and formable material"; however, the elastic strap as disclosed by Montgieux is obviously soft and formable, since the strap is wrapped around the contour body of the child and elasticity is expanded to form fit the child's body (col. 4, lines 39-66). Although Montgieux discloses wrapping the monitoring device around the abdominal of the child; thus, whether the breathing monitor is wrapped around the chest

or the abdominal is merely one's preference to monitor the breathing movement; since both areas moves when a person breathes.

Regarding claim 2: Montgieux discloses the transmitter housing comprises fasteners to allow for the strap to be connected in a manner circumscribing the wearers (Figs. 1-4). Although Montgieux discloses wrapping the monitoring device around the abdominal of the child; thus, whether the breathing monitor is wrapped around the chest or the abdominal is merely one's preference to monitor the breathing movement; since both areas moves when a person breathes.

Regarding claim 4: Montgieux discloses a breathing detection device and alarm comprising an attachable transmitter placed inside the box (1) and attached to an abdominal belt (29), that is elastic; the transmitter is wirelessly in communication with a portable receiver carried by the person monitoring the child (col. 3, lines 1-3).

Claims 3, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (US 4,696,307) in view of Teodorescu et al. (US 6,011,477) (of record).

Regarding claim 3: Montgieux does not disclose the sensors including a first and second resonant sensor and including a microphone housed with the chest strap. Teodorescu et al. discloses a respiration and movement monitoring system including a resonant sensor (50) and may be used interchangeably with first sensor (12) and second sensor (18) to monitor the respiration and movements of an infant (14) (col. 3, lines 55-61; col. 4, lines 34-54). Teodorescu et al. also discloses an audio detector unit (24) detects, filters, and amplifies audio signals produced proximal to support platform

(16) by, for example, a voice or sound associated with an infant (14) (col. 4, lines 8-11). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize resonant sensors to monitored the respiration and movement activities of the infant as taught by Teodorescu et al. in a system as disclosed by Montgieux for providing an effective fail-safe monitoring system.

Regarding claim 6: Montgieux does not disclose the antenna associated with the transmitter unit; however, transmitter and receiver including antennas for communication are well known in the art of wireless communication. Teodorescu et al. discloses the transmitter circuitry has a transmitter controller (26) communicating with an antenna and an audio detector unit (24), which is obviously a microphone for communicating the alarm signal to the remote station (30) (col. 4, lines 8-28).

Regarding claim 7: Montgieux discloses receiver technology, but does not disclose the digital-to-analog speaker amplification circuit; however, it is well known that the wireless transmitted signals are digital and it is being received as a digital signal until it is converted back to an analog signal and amplified and output to the speaker.

Regarding claim 8: Montgieux discloses the sensor box incorporate a transmitter for transmitting the alarm signal to a portable receiver carried by the person monitoring the child (col. 3, lines 1-3).

Regarding claim 9: Teodorescu et al. discloses the respiration monitor includes a first (12) and second (14) sensor and a resonant sensor (50) may be used interchangeably with the first and second sensor to monitor the respiration and movement of the infant (col. 3, lines 55-61; col. 4, lines 34-54).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (US 4,696,307) in view of Teodorescu et al. (US 6,011,477) (of record) as applied to claim 1 above and further in view of O'Dwyer (US 5,928,157) (of record).

Regarding claim 10: Montgieux in view of Teodorescu et al. does not disclose a comparator for comparing respiratory signal pattern. O'Dwyer discloses the respiration monitor comprises a comparator (103) that compares the respiration related signal patterns to a stored pattern, and monitors the heart rate or pulse as compared with an initial baseline measurement (col. 4, lines 6-31). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a comparator as taught by O'Dwyer in an infant respiratory monitoring system as disclosed by Montgieux in view of Teodorescu et al. for providing an effective respiration monitoring system that is only responsive to a real and true respiration alarm signal.

Regarding claim 11: O'Dwyer discloses the respiration monitor comprises a comparator (103) circuit that determines if either of the measured characteristic falls below an alarm point, and generates an alarm output impulse that communicates with the radio frequency transmitter (105), forming a synthesized signal that communicating with an antenna is well known in the art, and results in an alarm of a predetermined frequency for audible transmission through the speaker (60) of the receiver (58, 111, 115, 119) (col. 4, lines 6-31).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (US 4,696,307) in view of Tao (US 4,862,144) (of record). Montgieux does

not disclose a receiver comprises a light means. Tao discloses a receiver comprises a light means (42) for providing a visible alarm notification (col. 7, lines 34-36). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a light means in the receiver as taught by Tao in a system as disclosed by Montgieux for providing a visible alarm indication that is noticeable to the care taker.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan N Pham whose telephone number is (703)306-3038. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 20, 2004

APPROVED:
JIN F. NG
DIRECTOR, TC 2600

TOAN N. PHAM
PRIMARY EXAMINER